

Application No.: 09/787875

Docket No.: 05587-00311-US

AMENDMENTS TO THE CLAIMS

1. (previously presented) A process for preparing a homopolymer or copolymer having a melt flow index (MFR 190/15) of from 1.3 g/10 min to 10 g/10 min, a molecular weight distribution M_w/M_n of from 3 to 30, a bulk density of from 0.05 g/cc to 0.28 g/cc and an average particle size of from 5 μm to 300 μm which consists essentially of polymerizing a monomer using a mixed catalyst prepared by reacting a Ti(IV) compound with an organic aluminum compound at from -20°C to 50°C in a suspension medium for from 0.5 minute to 60 minutes.
2. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the melt flow index (MFR 190/15) is from 1.3 g/10 min to 10 g/10 min, the molecular weight distribution M_w/M_n is from 3 to 10, the bulk density is from 0.1 g/cc to 0.4 g/cc and the average particle size is from 20 μm to 200 μm .
3. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the melt flow index (MFR 190/15) is from 1.4 g/10 min to 5 g/10 min, the molecular weight distribution M_w/M_n is from 4 to 8, the bulk density is from 0.13 g/cc to 0.3 g/cc and the average particle size is from 60 μm to 180 μm .
4. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the melt flow index (MFR 190/15) is from 1.4 g/10 min to 3 g/10 min, the molecular weight distribution M_w/M_n is from 4 to 8, the bulk density is from 0.15 g/cc to 0.28 g/cc and the average particle size is from 60 μm to 160 μm .

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5. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the polymerization is carried out at a temperature of from 30°C to 130°C and a pressure of from 0.05 MPa to 4 MPa.
6. (previously presented) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the polymerization is carried out at a temperature of from 50°C to 90°C.
7. (previously presented) The process for preparing an ethylene homopolymer or copolymer as claimed in claim 1, wherein the concentrations of the reactants in the starting solutions in the preparation of the mixed catalyst are from 0.1 mol to 9.1 mol of Ti(IV) compound/l of solvent and from 0.01 mol to 1 mol of Al compound/l.
- 8-12. (cancelled)
13. (New) The process as claimed in claim 1, wherein reacting said Ti(IV) compound with said organic aluminum compound is at a temperature is from 0 to 30°C from 1 to 30 minutes.
14. (New) The process for preparing a homopolymer or copolymer as claimed in claim 1, wherein the polymerization is carried out at a temperature of from 50°C to 90°C and a pressure of from 0.02 MPa to 2 MPa.
15. (New) The process for preparing a homopolymer or copolymer as claimed in claim 14, wherein the pressure is from 0.04 MPa to 1 MPa.

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14. (New) A process for preparing a homopolymer or copolymer having a melt flow index (MFR 190/15) of from 1.3 g/10 min to 10 g/10 min, a molecular weight distribution M_w/M_n of from 3 to 30, a bulk density of from 0.05 g/cc to 0.28 g/cc and an average particle size of from 5 μm to 300 μm which consists of polymerizing a monomer using a mixed catalyst prepared by reacting a Ti(IV) compound with an organic aluminum compound at from -20°C to 50°C in a suspension medium for from 0.5 minute to 60 minutes.